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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,077	04/25/2001	Masashi Yamawaki	02416-00008	5889

7590 11/07/2005  
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EXAMINER
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TORRES, JUAN A

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/841,077

Applicant(s)

YAMAWAKI, MASASHI

Examiner

Juan A. Torres

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 9-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/17/2005 has been entered.

### ***Claim Objections***

In view of the amendment filed on 10/17/2005, the Examiner withdraws claim objections of claim 17 of the previous Office action.

### ***Response to Arguments***

Applicant's arguments filed on 10/17/2005 have been fully considered but they are not persuasive.

The Applicant contends, "Wilson et al. fails to disclose or suggest the data processor and data processing method as claimed in the present invention."

The Examiner disagrees and asserts, that, as indicated in the previous Office action Wilson discloses a data processor comprising a receiving unit for receiving a series of data including predetermined marks and generating a plurality of parallel data from the series of data (figure 5 block 510 column lines 7 lines 53-56); and a plurality of detecting units for detecting said predetermined marks for detecting synchronization from the plurality of parallel data (figure 5 blocks 515 and 516 column 7 lines 53-56);

Art Unit: 2631

Wilson also discloses a method comprising the following steps of receiving a series of data including predetermined marks for detecting synchronization (figure 5 input block 510 line 508 column lines 7 lines 48-52); generating a plurality of parallel data from the series of data (figure 5 output of block 520 input of blocks 515 and 516 column 7 lines 53-58); detecting the predetermined marks for detecting synchronization from the plurality of parallel data to establish synchronization of the series of data (figure 5 blocks 515 and 516 column 7 lines 53-56); and demodulating the series of data based on the predetermined marks for detecting synchronization included in the series of data (figure 5 block 556 column 11 lines 8-16).

As per claims 1 and 10-11

The Applicant contends, "Applicant respectfully submits that each and every element recited within independent claims 1 and 10-11 is neither disclosed nor suggested by Wilson et al., and therefore is patentable and in condition for allowance. Reconsideration is requested."

The Examiner disagrees and asserts, that, as indicated in the previous Office action as per claim 1 Wilson discloses a data processor comprising a receiving unit for receiving a series of data including predetermined marks and generating a plurality of parallel data from the series of data (figure 5 block 510 column lines 7 lines 53-56); and a plurality of detecting units for detecting said predetermined marks for detecting synchronization from the plurality of parallel data (figure 5 blocks 515 and 516 column 7 lines 53-56). As per claim 10 Wilson discloses a data processor for detecting predetermined marks for detecting synchronization included in a series of data read

Art Unit: 2631

from a memory medium in order to establish synchronization at a time of transferring series of data to a controller unit from a read channel unit comprising: a receiving unit for receiving the series of data including predetermined marks for detecting synchronization and generating a plurality of parallel data from the series of data (figure 5 block 510 column lines 7 lines 53-56); and a plurality of detecting units for detecting the predetermined marks for detecting synchronization from the plurality of parallel data (figure 5 blocks 515 and 516 column 7 lines 53-56). As per claim 11 Wilson discloses a method comprising the following steps of receiving a series of data including predetermined marks for detecting synchronization (figure 5 input block 510 line 508 column lines 7 lines 48-52); generating a plurality of parallel data from the series of data (figure 5 output of block 520 input of blocks 515 and 516 column 7 lines 53-58); detecting the predetermined marks for detecting synchronization from the plurality of parallel data to establish synchronization of the series of data (figure 5 blocks 515 and 516 column 7 lines 53-56); and demodulating the series of data based on the predetermined marks for detecting synchronization included in the series of data (figure 5 block 556 column 11 lines 8-16). For these reasons and the reason stated on the previous Office action, the rejection of claims 1 and 10-11 are maintained.

As per claims 2-7, 9, 17 and 12-16:

The Applicant contends, "It is further submitted that dependent claims 2-7, 9 and 17 and dependent claims 12-16 are also patentable and in condition for allowance due to their dependency upon independent claims 1 and 11, respectively".

The Examiner disagrees and asserts, that, because the rejections of claims 1 and 11 are maintained, the rejections of claims 2-7, 9, 17 and 12-16 are also maintained. For these reasons and the reason stated on the previous Office action, the rejection of claims 2-7, 9, 17 and 12-16 are maintained.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2; 3; 4; 5; 6; and 7 recites the limitation "predetermined marks" in lines 2; 3; 2 and 3; 2; 2; and 2 respectively. There is insufficient antecedent basis for this limitation in the claim. Claim 1 recited "predetermined mark", so it is only one predetermined mark, but claims 2-7 are claiming a plurality of predetermined marks.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 17 is vague and indefinite because it is not clear what claim 17 is trying to claim. Claim 17 recites: "17. (Currently Amended) A data processor

Art Unit: 2631

according to claim 1, wherein said plurality of detecting units detect the corresponding each of a plurality of parallel data."

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 are rejected under 35 U.S.C. 102(e) as being anticipated by Wilson (US 6118603 A).

As per claim 1 Wilson discloses a data processor comprising a receiving unit for receiving a series of data including a predetermined mark for detecting synchronization and generating parallel data from the series of data (figure 5 block 510 column lines 7 lines 53-56); and a plurality of detecting units being provided a each bit position of the parallel data for detecting said predetermined mark for detecting synchronization from the parallel data (figure 5 blocks 515 and 516 column 7 lines 53-56; and column 8 lines 13-65).

As per claim 2 Wilson discloses claim 1. Wilson also discloses that the plurality of detecting units detect the predetermined marks for detecting synchronization in a predetermined bit width among the series of data in parallel condition (figure 5 blocks 515 and 516 column 7 lines 53-56; and column 8 lines 13-65).

As per claim 3 Wilson discloses claim 1. Wilson also discloses a generation timing selecting unit for selecting generation timing of the window for detecting the predetermined marks based on the predetermined marks for detecting synchronization (figure 5 block 506 column 7 lines 44-46).

As per claim 4 Wilson discloses claim 1. Wilson also discloses a data demodulating unit for demodulating the series of data between the predetermined marks for detecting synchronization based on the predetermined marks for detecting synchronization (figure 5 block 556 column 11 lines 8-16).

As per claim 5 Wilson discloses claim 1. Wilson also discloses a detection line memory unit for storing a detection line based on the predetermined marks for detecting synchronization (column 11 line 66 to column 12 line 8).

As per claim 6 Wilson discloses claim 1. Wilson also discloses a data selecting unit for selecting data based on the predetermined mark for detecting synchronization (figure 5 block 564 column 11 lines 54-65).

As per claim 7 Wilson discloses claim 1. Wilson also discloses a data counting unit for counting the series of data between the predetermined mark for detecting synchronization based on the predetermined marks for detecting synchronization (figure 5 block 542 and figures 6 and 7 column 9 lines 15-23).

As per claim 9 Wilson discloses claim 1. Wilson also discloses a shift register to input the plurality of parallel bits connected with the detecting units in the same number as the number of parallel data (figure 5 block 510 column 7 lines 56-58; and column 8 lines 13-65).



As per claim 10 Wilson discloses a data processor for detecting a predetermined mark for detecting synchronization included in a series of data read from a memory medium in order to establish synchronization at a time of transferring series of data to a controller unit from a read channel unit comprising a receiving unit for receiving the series of data including the predetermined mark for detecting synchronization and generating parallel data from the series of data (figure 5 block 510 column lines 7 lines 53-56); and a plurality of detecting units being provided a each bit position of the parallel data for detecting the predetermined marks for detecting synchronization from the plurality of parallel data (figure 5 blocks 515 and 516 column 7 lines 53-56; and column 8 lines 13-65).

As per claim 11 Wilson discloses a method comprising the following steps of receiving a series of data including predetermined marks for detecting synchronization (figure 5 input block 510 line 508 column lines 7 lines 48-52); generating a plurality of parallel data from the series of data (figure 5 output of block 520 input of blocks 515 and 516 column 7 lines 53-58); detecting the predetermined marks for detecting synchronization from the plurality of parallel data to establish synchronization of the series of data (figure 5 blocks 515 and 516 column 7 lines 53-56); and demodulating the series of data based on the predetermined marks for detecting synchronization included in the series of data (figure 5 block 556 column 11 lines 8-16).

As per claim 12 Wilson discloses claim 11. Wilson also discloses a method where the predetermined marks for detecting synchronization are detected in a

predetermined bit widths of the series of data in parallel condition (figure 5 blocks 515 and 516 column 7 lines 53-56; and column 8 lines 13-65).

As per claim 13 Wilson discloses claim 11. Wilson also discloses a method where generation timing of a window for detecting predetermined marks is selected based on the detected predetermined marks for detecting synchronization (figure 5 block 506 column 7 lines 44-46).

As per claim 14 Wilson discloses claim 11. Wilson also discloses a method where a detection line is stored based on the detected predetermined marks for detecting synchronization (column 11 line 66 to column 12 line 8).

As per claim 15 Wilson discloses claim 11. Wilson also discloses a method where the data is selected based on the detected predetermined marks for detecting synchronization (figure 5 block 564 column 11 lines 54-65).

As per claim 16 Wilson discloses claim 1. Wilson also discloses a method where the data between the detected predetermined marks for detecting synchronization is counted up (figure 5 block 542 and figures 6 and 7 column 9 lines 15-23).

As per claim 17 Wilson discloses claim 1. Wilson also discloses that said plurality of detecting units detect a plurality of parallel data (figure 5 blocks 515 and 516 column 7 lines 53-56; and column 8 lines 13-65).

### ***Conclusion***

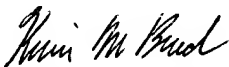
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is (571) 272-3119. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:00 PM.

Art Unit: 2631

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Juan Alberto Torres  
10-26-2005

  
**KEVIN BURD**  
**PRIMARY EXAMINER**